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Billingham Urban District Council

ANNUAL REPORT

OF THE

Medical Officer of Health

AND

Senior Public Health Inspector

1962



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Health Department,
Council Offices,
Haverton Hill,
Billingham.
August, 1963.

REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1962

Mr. Chairman, Ladies and Gentlemen,

It gives me great pleasure to present my 21st Annual Report on the health of Billingham and the work in my department for the year 1962.

While all the essential statistical data relating to health appears in the body of my report, there are certain notable items which I would like to discuss here.

According to the Registrar General's mid-year estimate, the population of the Urban District rose by 600 to 32,480. The natural increase, excess of births over deaths, was 475.

Since 1958 there has been a steady decline in birth rate, from 26.9 in 1958 to 22.2 in 1962. This rate, however, is still well above the national figure after the usual adjustments.

The death rate of 7.6 per 1,000 population was 0.8 lower than last year, but the standardised rate of 13.7 was substantially higher than the national figure which was 11.9.

My joy expressed in last year's report on the lowest infant mortality rate for Billingham of 17.4 per 1,000 live births since I took office in 1942 unfortunately had to be short lived. Thirty-three infant deaths occurred in the area which gave a rate of 45.8, the highest since 1954 when the rate was 47.3. This undue loss of life remains a very important problem and calls for a re-examination of the approach to ante-natal and child care.

Although non-pulmonary tuberculosis has almost disappeared, there is a danger in becoming complacent about pulmonary tuberculosis. The drugs now used are so effective that there is the danger of patients escaping specialist care and control-treatment being prematurely terminated. Death may be prevented, but the disease will eventually reach a chronic state and cause fresh infections.

One cannot over-emphasise the need for intensifying diphtheria and poliomyelitis immunisation programmes. These diseases have declined but are by no means extinct and must always be regarded as potentially dangerous. Outbreaks, varying in severity, still occur up and down the country.

Problem families remain a difficult problem. Many will need prolonged supervision. A home teacher is needed who can supervise and method-train the parents by degrees. One or both of the parents may be below average ability and unable to cope with child care, wise spending of the often low income and may even find themselves unable to keep clean the children, the clothes or the house. Cooking of meals may be elementary and primitive, mending, sewing and ironing never attempted. The ability to recognise and treat illness and understand elementary principles of hygiene is often lacking. Homecraft training of adolescents who are below average intelligence and who may marry early, should be intensified and continued beyond school leaving age and supervision, coupled with an adequate scheme of home tuition, should also be prolonged. Special low cost, easily run houses might well be provided, needing a minimum of maintenance, and I would like to see incontinent children supplied with waterproof mattresses and cheap drip-dry bedding. Too often all they possess is a heap of filthy rags not sufficient to keep them warm, and not easily washed or dried.

In conclusion I wish to express my appreciation for the help and co-operation I have received from the Chairman, Members of the Council, Chief Officials and all staff in the Health Department.

I have the honour to be

Your obedient Servant,

L. R. BENHAM,

Medical Officer of Health.

Staff:—

Medical Officer of Health:

Lalage R. Benham, M.B., B.S., D.P.H.

Senior Public Health Inspector:

A. H. Rushworth, C.R.S.H., F.A.P.H.I.

Deputy Public Health Inspector:

R. Love, M.R.S.H., M.A.P.H.I.

Additional Public Health Inspector:

R. E. Lund, M.R.S.H., M.A.P.H.I. (from March, 1962).

Clerks:

R. Watson, A.R.I.P.H.H. (from July, 1962).

D. M. Baker.

M. L. Blane.

A. J. Featham.

A. Walton.

Population

The resident population of the Urban District at mid-year was estimated by the Registrar General to be 32,480. My figures

have been calculated on this basis according to normal and previous practice.

Births

The total number of live births registered during the year was 721 (376 males and 345 females), a decrease of 22. Last year's figures were 743 (394 males and 349 females).

The crude birth rate was 22.2 per 1,000 population. The standardised rate (i.e. when adjusted for age and sex distribution of the population) was 19.3, the comparability factor being 0.87.

There were included in the total number of live births 29 illegitimate births (17 males and 12 females). Although this was an increase of 12 on last year, the rate in the past decade has never been above 4.3 per 100 live births.

Illegitimate births in Billingham over the past ten years:—

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Total	17	12	25	22	28	27	23	33	17	29
Rate per 100 live births	3.3	2.4	3.9	3.3	4.0	3.6	3.2	4.3	2.3	4.0

Still Births

There were 12 still births (7 males and 5 females), making the rate per 1,000 total live births 16.7. Last year's figures were 11 (6 males and 5 females) with a rate of 14.8.

Deaths

The number of deaths registered was 246, 23 fewer than last year. There were 140 males and 106 females, giving a crude rate of 7.6 per 1,000 population. The adjusted rate was 13.7, the comparability factor being 1.80.

The principal causes of death were from:—

	Male	Female	Total
Coronary disease—Angina	35	13	48
Other heart disease	14	9	23
Cancer—various sites	33	22	55
Vascular lesions of nervous system	14	12	26
Respiratory disease	16	11	27
Other defined and ill-defined diseases	12	12	24

Infant Deaths under One Year

There were 33 deaths of children under one year of age (12 males and 21 females) giving an infant mortality rate of 45.8 per 1,000 live births.

Infant Deaths under Four Weeks

Twenty-one children died under four weeks of age=29.1 per

1,000 births (neo-natal mortality rate).

Infant Deaths under One Week

Fifteen children died under one week of age = 20.1 per 1,000 births (early neo-natal mortality rate).

Infant Deaths under One Day

Ten children died within twenty-four hours of birth.

Comparison of Infantile Death Rate

Billingham 45.8 England and Wales 21.4

The infantile death rate was 28.4 more than last year and 24.4 more than England and Wales.

Infant deaths under one day (10), one week (5), one month (6), and under twelve months (12), making a total of 33 deaths, which were chiefly due to prematurity and congenital abnormalities.

Cause of Death	Under 1 Day	Under 1 Week	Under 1 Month	Total under 4 wks.	1-3 Mths	4-6 Mths	7-12 Mths	Total under 1 Yr.	Died in Hosp.	Died at Home
Prematurity ..	7	4	1	12	—	—	—	12	10	2
Congenital Abnormalities ..	3	1	5	9	1	2	1	13	10	3
Pneumonia ..	—	—	—	—	1	—	2	3	1	2
Bronchitis ..	—	—	—	—	2	1	1	4	1	3
Meningitis ..	—	—	—	—	1	—	—	1	1	—
Totals	10	5	6	21	5	3	4	33	23	10

The following table gives the infant deaths in the various areas for the years 1962, 1961 and 1960. The infant mortality rates are also given, together with the births for the same periods:—

Area 1. Haverton Hill with Port Clarence and Cowpen Bewley.

Area 2. Pre-war Billingham (south of the railway).

Area 3. The new town (north of the railway).

	Infant Deaths			Births			I.M. Rate		
	1962	1961	1960	1962	1961	1960	1962	1961	1960
1. Haverton	7	3	7	187	168	176	37.4	17.8	39.7
2. Billingham S. ..	3	5	5	99	120	117	30.3	41.6	42.7
3. Billingham N. ..	23	5	10	435	455	469	52.9	10.3	21.3

The tables below show the total number of live births, infant deaths and the infant mortality rate each year for Billingham from 1943 to 1962:—

	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952
Births	365	464	434	515	538	496	489	496	482	471
Infant Deaths ..	24	38	30	23	28	32	27	18	20	20
Infant Mortality Rates ..	65·8	81·9	69·1	44·7	52·0	64·5	55·2	36·3	41·5	42·5

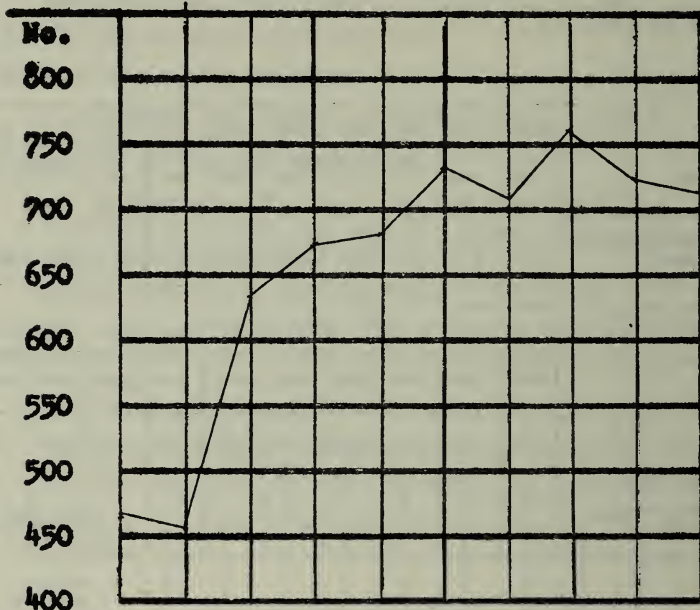
	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Births	522	507	637	670	697	756	709	762	743	721
Infant Deaths ..	19	24	20	21	28	18	20	22	13	33
Infant Mortality Rates ..	36·4	47·3	31·4	31·3	40·1	23·8	28·2	28·8	17·4	45·8

This table shows a steady decline in the infant mortality rate in Billingham but it is still well above the figure for England and Wales.

	1943—1947	1948—1952	1953—1957	1958—1962
Births	2316	2434	3033	3691
Infant Deaths ..	143	117	112	106
Infant Mortality Rates	61·7	48·5	36·9	28·7

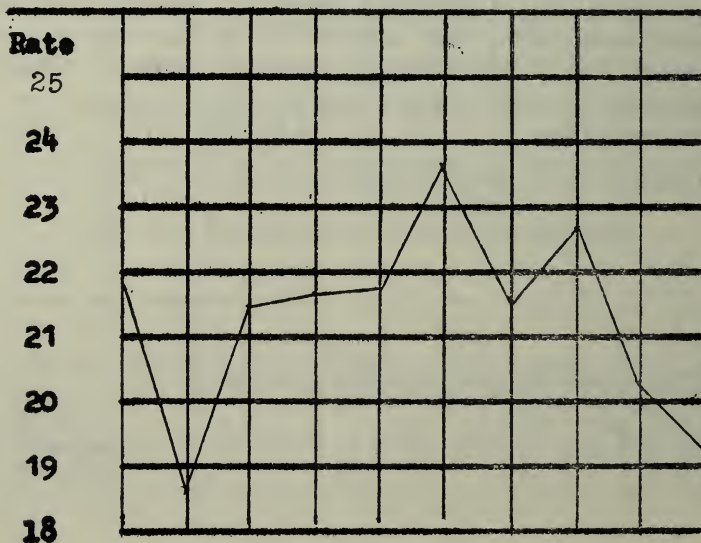
Number of births 1953 - 1962 shown graphically.

Year 53 54 55 56 57 58 59 60 61 62

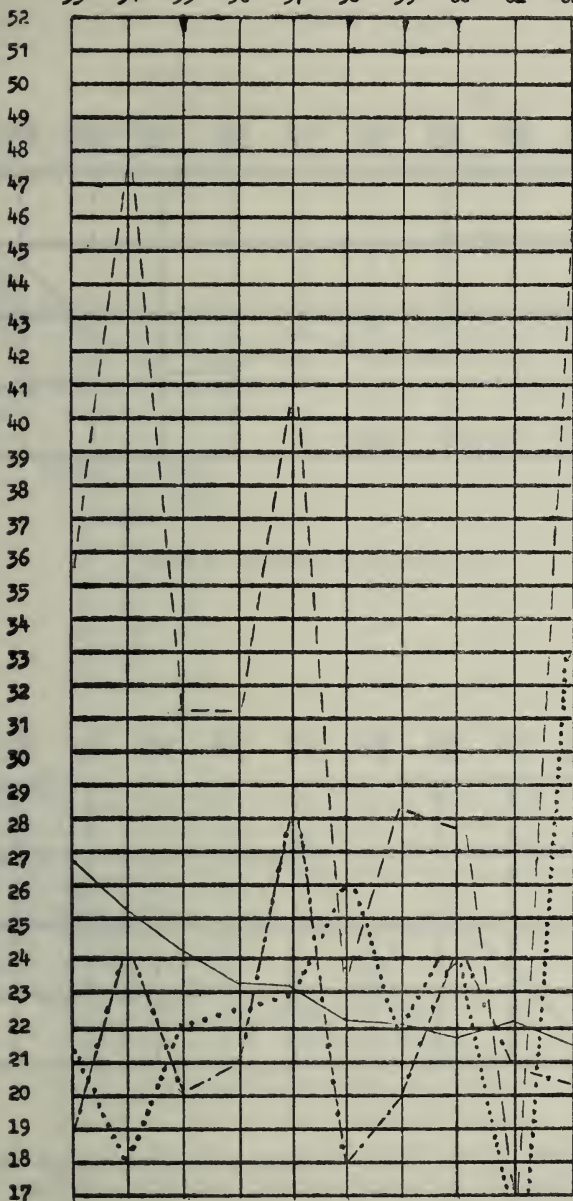


Adjusted Birth Rate

Year 53 54 55 56 57 58 59 60 61 62

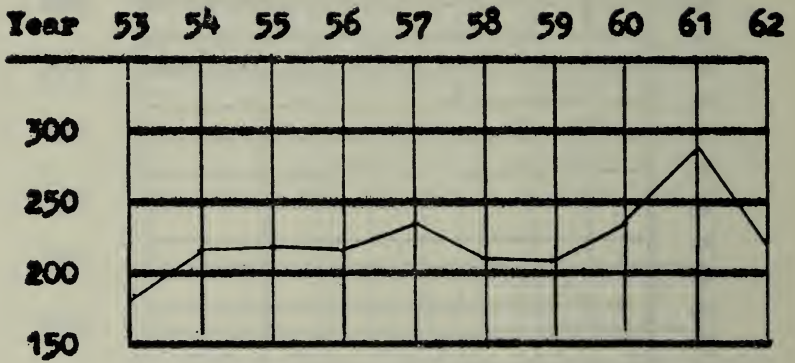


53 54 55 56 57 58 59 60 61 62

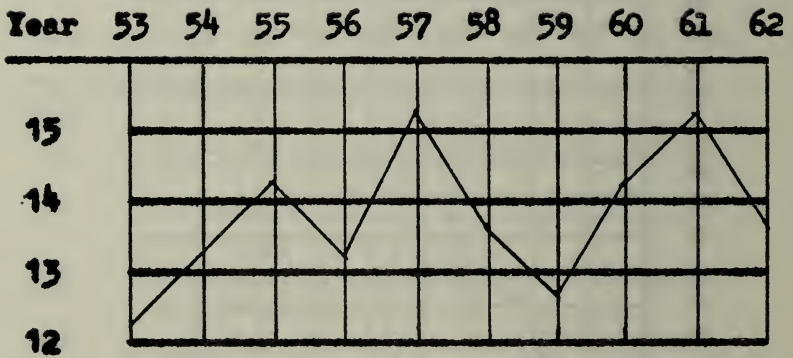


Infant Mortality Rate	England and Wales	.....
Infant Mortality Rate	Billingham	.....
Infant Deaths		.....
Adjusted Birth Rate		.....

DEATHS



ADJUSTED DEATH RATE



The above graphs illustrate bigger fluctuations in the adjusted death rate than in the actual number of deaths occurring in the district over the past ten years.

Still Births

There were 12 still births in the area (7 males and 5 females). Nine were born in hospital and three at home.

Area 1	...	...	...	2
Area 2	...	...	...	—
Area 3	...	...	...	10

Perinatal Mortality

Still births plus deaths of infants under one month of age:—

Area 1	...	...	...	5
Area 2	...	...	...	1
Area 3	...	...	...	27

Births

There were 721 born, 22 less than last year.

The birth rate of 22.2 per 1,000 population was 1.1 lower than last year. The death rate of 7.6 per 1,000 was 0.8 lower than in 1961, and the majority of deaths were again people over 55 years, as shown below:—

		Male	Female	Total
Under 1 year	...	12	21	33
1—4 years	...	1	—	1
5—14	„	—	—	—
15—24	„	3	—	3
25—34	„	3	2	5
35—44	„	10	2	12
45—54	„	10	8	18
55—64	„	40	17	57
65 and over	...	61	56	117
		<hr/> 140	<hr/> 106	<hr/> 246

During the year there were 721 live births and 12 still births. The ante-natal clinics were attended by 54 mothers or only 7.5%, the lowest attendance ever recorded, while 349 babies were brought to the infant welfare clinics. Altogether, 724 children aged 1 to 5 years attended clinics.

The number of persons on the register at all clinics was compiled as follows:—

Billingham Ante-natal Clinics	...	51	(—36)
Haverton Hill Ante-natal Clinic	...	3	(—1)
Billingham Infant Welfare Clinics	...	288	(—78)
Haverton Hill Infant Welfare Clinic	...	64	(+21)
Billingham Child Welfare Clinics, 1-5 yrs.	...	623	(+87)
Haverton Hill Child Welfare Clinic, 1-5 yrs.	...	101	(+23)
Birth Control Clinics	...	8	(+4)
Post Natal Clinics	...	16	(—5)
Ultra Violet Rays	...	64	(—4)
		<hr/> 1,218	<hr/> (+11)

There was an increase of 11 in the number on the register.

Attendances at the clinics were:—

	Billingham				Haverton Hill			
	1962	1961	Increase/Decrease		1962	1961	Increase/Decrease	
Mothers	215	434	—	219	11	7	4	—
Infants	3142	3548	—	406	496	337	159	—
1-2 years	683	610	73	—	70	75	—	5
2-5 years	544	478	66	—	122	85	37	—
Totals	4584	5070	—	486	699	504	195	—

This shows an increase of children 1-2 years and 2-5 years attending the clinics at Billingham. There was an increase in mothers, infants and children 2-5 years attending the Haverton Hill Clinic.

The following table compares the number of live births with the number of mothers and children attending the ante-natal and child welfare clinics, also the rate per 100 births of those attending the clinics for the past ten years (percentage attendance):—

Year	Births	Attending Ante-natal Clinics	Rate per 100	Attending Infant Clinics	Rate per 100	Attending Clinics 1-5 years
1953	522	344	66	274	52	585
1954	507	290	57	237	47	534
1955	637	334	52	288	47	515
1956	670	282	42	302	45	468
1957	697	248	36	259	37	432
1958	756	175	23	293	39	414
1959	709	154	22	241	34	424
1960	762	145	19	380	50	657
1961	743	91	12	409	55	614
1962	721	54	7	352	49	724

Welfare Foods

These were distributed from the following centres:—

Child Welfare Clinic, Queensway, Billingham.

Child Welfare Clinic, Cowpen Lane, Billingham.

Child Welfare Clinic, Tame Street, Haverton Hill.

W.V.S. Centre, South View, Billingham.

Figures for the distribution of National Welfare Foods are given as follows, together with the distribution during 1961:—

	1962	1961
National Dried Milk—tins	1,507	2,326
Cod Liver Oil—bottles ...	623	1,077
Orange Juice—bottles ...	3,179	7,023
Vitamin Tablets—packets	504	834
	<u>5,813</u>	<u>11,260</u>

Notifiable Diseases

There were 297 notifications of infectious disease received during the year, an increase of 100 on the 1961 figure. Tuberculosis notifications numbered 8, all of which were pulmonary.

Separate figures are given in the following tables. Tuberculosis cases are dealt with separately.

A table showing the notifications from 1953 to 1962 is also given for comparison:—

	Under One Year	Years								25 & Over	Total
		1	2	3	4	5-9	10-14	15-24			
Scarlet Fever ..	—	—	2	1	2	4	1	—	1	11	
Measles ..	9	25	43	40	26	118	—	—	—	261	
Whooping Cough ..	3	2	3	3	—	2	—	—	—	13	
Erysipelas ..	—	—	—	—	—	—	—	—	2	2	
Dysentery ..	1	1	—	1	—	2	1	—	4	10	
Totals ..	13	28	48	45	28	126	2	-	7	297	

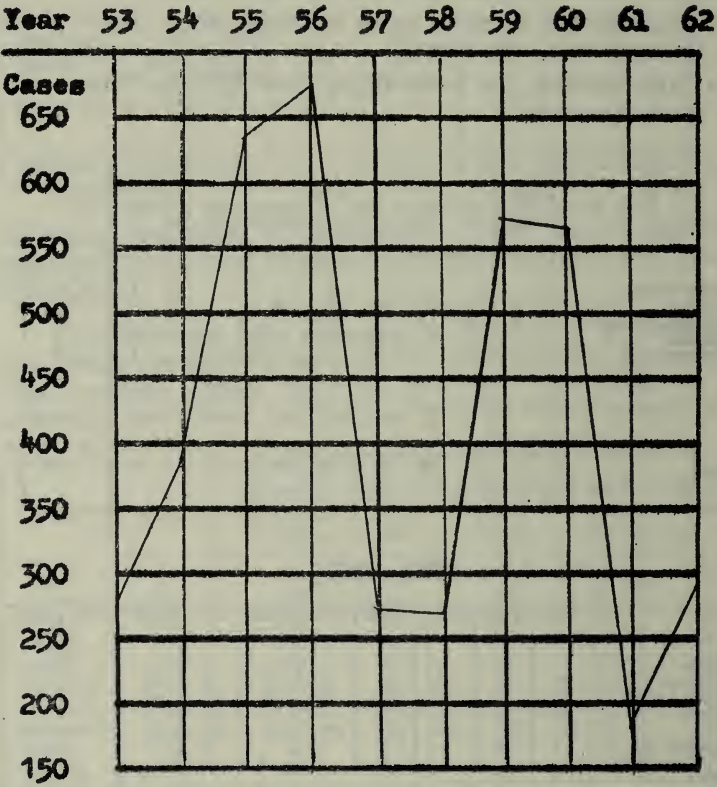
1953—1962

	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962
Diphtheria ..	—	—	1	—	—	—	—	—	—	—
Scarlet Fever ..	56	51	24	24	61	57	26	35	11	11
Whooping Cough ..	55	48	136	145	10	31	47	45	1	13
Pneumonia ..	29	15	16	9	3	1	—	1	—	—
Measles ..	105	257	443	488	206	188	461	457	179	261
Poliomyelitis (P) ..	1	1	—	2	6	—	4	1	—	—
Poliomyelitis (N.P.) ..	—	—	—	4	1	4	1	—	—	—
Dysentery ..	2	6	9	3	—	4	7	6	5	10
Erysipelas ..	8	3	4	3	2	2	1	—	—	2
Puerperal Pyrexia ..	—	1	—	—	1	1	—	1	—	—
Ophthalmia ..	—	—	—	—	—	—	—	—	—	—
Neonatorum ..	1	1	—	—	—	—	—	—	—	—
Food Poisoning ..	2	—	—	—	6	—	6	—	1	—
Meningococcal Infection ..	3	1	1	—	—	1	—	—	—	—
Totals	262	384	634	678	296	289	553	546	197	297

There was one case of paralytic poliomyelitis during the year which was not notified to my department. The case was an expectant mother who was treated in hospital. She made a good recovery and gave birth to a normal, healthy child.

Ten cases of dysentery were notified of which 5 were admitted to hospital, the remainder were treated at home.

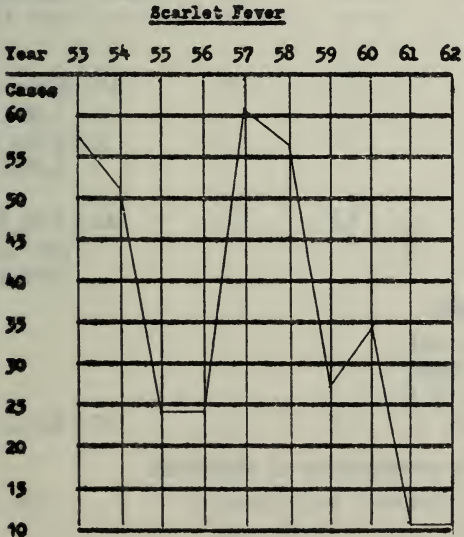
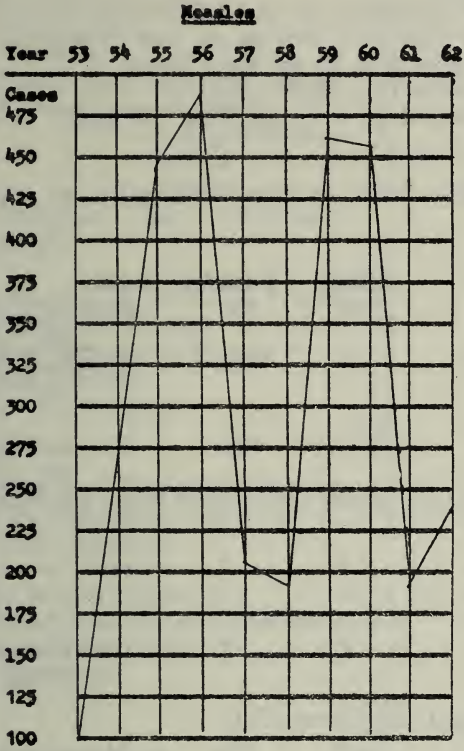
The table below shows the number of notifications of infectious disease received during the past ten years.



The rates per 1,000 population for Scarlet Fever and Measles are shown below.

Disease				1961	1962
Scarlet Fever	..	..		1.2	0.3
Measles	..	..		16.0	8.0

The total number of notifications of Measles and Scarlet Fever are shown for the past ten years below graphically, and illustrate an alternating incidence.



Statistics and Social Conditions of the Area

Area (Acres)	10,663
Population (Registrar General's Estimate, 1961)...	32,480
Number of Inhabited Houses on 31st December, 1961, according to the Rate Books	9,657
Rateable Value (1st April, 1962)	£963,353
Sum represented by a Penny Rate (31/3/62) ...	£4,000

Vital Statistics

Extracts from vital statistics as supplied by the Registrar General:—

Births

	Males	Females	Total	
Legitimate ...	359	333	692	= Leg. rate of 21.3 per 1,000 pop.
Illegitimate ...	17	12	29	= Illeg. rate of 0.9 per 1,000 pop.
	<hr/> 376	<hr/> 345	<hr/> 721	= Birth rate of 22.2 per 1,000 pop.

Illegitimate Live Births (per cent of total live births)=4.0.

Still Births

Legitimate ...	7	4	11	
Illegitimate ...	—	1	1	
	<hr/> 7	<hr/> 5		12=Rate of 16.6 per 1,000 births

Total live and still births=733.

Deaths ...	140	106	246	=Death rate of 7.6 per 1,000 pop.
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Infant Deaths

Legitimate ...	12	19	31	=Rate of 43.0 per 1,000 live births
Illegitimate ...	—	2	2	=Rate of 2.8 per 1,000 live births
	<hr/> 12	<hr/> 21	<hr/> 33	=I.M. Rate of 45.8 per 1,000 live births

Perinatal Mortality

Still Births and deaths under 1 week combined ...	14	13	27	=Rate of 36.8
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Women dying in consequence of childbirth

Pregnancy, childbirth and abortion	Nil.
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Causes of Death

	Male	Female	Total
Tuberculosis (respiratory)	1	—	1
Tuberculosis (other)	1	—	1
Syphilitic Disease	—	1	1
Other Infective and Parasitic Disease	—	1	1
Malignant Neoplasm—Stomach ...	6	5	11
„ „ —Lung, Bronchus ...	13	3	16
„ „ —Breast ...	—	4	4
„ „ —Uterus ...	—	2	2
Other Malignant and Lymphatic Neoplasms	14	8	22
Diabetes	—	2	2
Vascular Lesions of Nervous System	14	12	26
Coronary Disease—Angina	35	13	48
Hypertension with Heart Disease ...	1	3	4
Other Heart Disease	13	6	19
Other Circulatory Disease	3	6	9
Pneumonia	10	6	16
Bronchitis	4	5	9
Other Diseases of Respiratory System	2	—	2
Gastritis, Enteritis and Diarrhoea ...	2	—	2
Nephritis and Nephrosis	1	3	4
Hyperplasia of Prostate	1	—	1
Congenital Malformations	2	9	11
Other Defined and Ill-defined Diseases	12	12	24
Motor Vehicle Accidents	2	1	3
All other Accidents	1	2	3
Suicide	2	2	4
Totals (All Causes)	140	106	246

Tuberculosis

The following table gives the number of notifications of pulmonary and non-pulmonary tuberculosis in the different age groups. Deaths are also shown.

Age Group	NEW CASES				DEATHS			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0- 1	—	—	—	—	—	—	—	—
1- 4	—	—	—	—	—	—	—	—
5-14	—	—	—	—	—	—	—	—
15-24	—	2	—	—	—	—	—	—
25-34	—	—	—	—	—	—	—	—
35-44	1	1	—	—	—	—	—	—
45-54	1	—	—	—	—	—	—	—
55-64	2	—	—	—	—	—	—	—
65-up	1	—	—	—	1	—	1	—
Totals:	5	3	—	—	1	—	1	—

This gives a total of 8 notifications of pulmonary tuberculosis, 2 more than last year. No new cases of non-pulmonary tuberculosis were notified. There were 2 deaths, 1 pulmonary, 3 less than last year, and 1 non-pulmonary. Last year there were no non-pulmonary deaths. Neither of the deaths were on my tuberculosis register.

At the beginning of the year there were 129 pulmonary cases (71 made and 58 female) on the register. The number at the end of the year was 132, as shown below:—

				Males	Females
As at 1st January, 1962	...	...	...	71	58
ADD					
New notifications	...	...	...	5	3
Transfers into area	...	...	...	1	—
				77	61
LESS					
			M. F.		
Died	...	...	—	—
Recovered	...	...	2	2	
Transferred out	...	...	—	2	
			—	—	
				2	4
				75	57

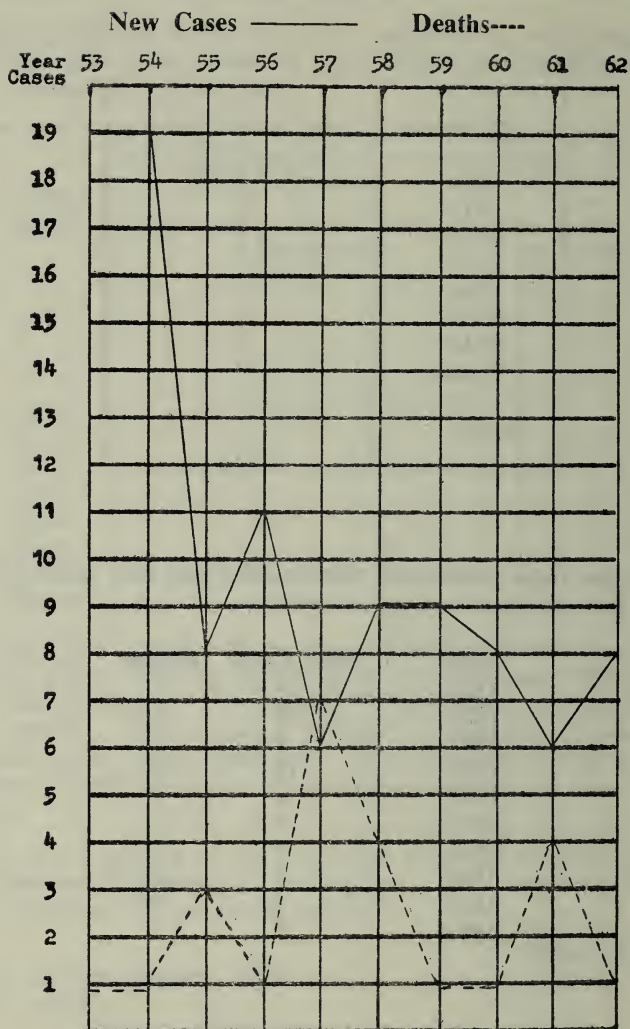
Pulmonary Tuberculosis—New Cases

Age Period	1962	1961
1- 4	—	—
5-14	—	—
15-24	2	2
25-34	—	1
35-44	2	—
45-54	1	2
55-64	2	1
65-up	1	—
Totals:	8	6

Deaths from pulmonary tuberculosis and new cases notified for the last ten years are given below:—

Year	New Cases	Deaths
1953	19	1
1954	19	1
1955	8	3
1956	11	1
1957	6	7
1958	9	4
1959	9	1
1960	8	1
1961	6	4
1962	8	1

Pulmonary Tuberculosis



B.C.G. Vaccination (in senior schools aged 11 years and upwards)

Skin Tests	...	...	...	...	...	...	625
Negative reactors who received B.C.G. Vaccination	...	...	...	...	...	...	500
Positive reactors	...	...	...	...	...	...	76

There were 18 absent or for health reasons could not be vaccinated.

Diphtheria Immunisation

The following table has been compiled from information received from Durham County Council:—

Year of Birth	Diphtheria (Single or in Combination)		Whooping Cough (Single or in Combination)		Tetanus in Combination	
	Primary	Booster	Primary	Booster	Primary	Booster
1948	—	7	—	—	—	—
1949	—	11	—	—	—	—
1950	—	15	—	—	—	—
1951	—	45	—	—	2	—
1952	—	121	—	—	5	—
1953	1	211	—	—	13	—
1954	—	105	—	—	10	—
1955	1	155	1	2	13	2
1956	—	210	—	19	9	17
1957	4	286	3	55	30	58
1958	11	18	9	11	15	12
1959	17	11	20	11	13	12
1960	43	17	43	12	39	15
1961	266	2	264	2	255	2
1962	128	—	120	—	117	—
Totals:	471	1,214	460	112	521	118

Poliomyelitis Immunisation

Poliomyelitis immunisation in Billingham during 1962:—

Number who have received 2 injections of “ Salk Vaccine ” 2,377

Number who have received 3 doses of “ Oral Vaccine ” 8,234

Persons given third injections of “ Salk Vaccine ” 1,695

Persons given fourth injections of “ Salk Vaccine ” 234

Number given reinforcing doses of “ Oral Vaccine ” after 2 doses of “ Salk ” 2,052

Number given reinforcing doses of “ Oral Vaccine ” after 3 doses of “ Salk ” 2,250

The Nursery, Tame Street, Haverton Hill

A table showing the attendances is given below:—

Month	Days Open	Total Attendances	Daily Average	Daily Maximum
January ..	22	286	13.0	16
February ..	20	249	12.4	16
March ..	22	292	13.3	17
April ..	19	318	16.7	19
May ..	23	371	16.1	18
June ..	20	295	14.7	18
July ..	22	250	11.3	14
August ..	22	186	8.9	13
September ..	20	227	11.3	13
October ..	23	310	13.0	16
November ..	22	296	13.4	16
December ..	19	277	14.5	18

There were no epidemics during the year, and the children were mostly in good health.

Children are given pre-school education, which includes painting, clay modelling, singing and dancing, and are also taught food habits and to dress themselves. The two to five-year-olds have three good meals a day.

Home Safety

Meetings of the Home Safety Committee continue to be held every two months and are attended by Members of the Council and representatives of voluntary organisations.

Local Home Safety Campaigns are held and national ones supported by the distribution of leaflets and display of posters. Competitions are held in conjunction with head teachers at schools in the area. Talks and demonstrations are given at varying intervals.

In a report submitted at each meeting, details of home accident cases admitted to Stockton and Thornaby Hospital and Stockton Children's Hospital are given.

The table below shows cases of home accidents admitted to Stockton and Thornaby Hospital and Stockton Children's Hospital:—

Cause	Under 1 yr.		1-4		5-14		15-24		25-44		45-64		65-74		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Falls	—	1	2	2	7	1	—	—	1	3	—	5	—	2	10	14
Burns	—	—	—	—	3	1	—	—	—	3	1	—	—	—	4	4
Scalds	1	—	2	—	—	—	—	—	—	—	—	2	—	—	3	2
Cuts	—	—	3	—	—	1	1	1	—	—	1	—	1	—	5	4
Others	—	—	3	6	1	—	—	—	2	—	2	—	—	—	4	10
Totals	1	1	10	8	11	3	1	1	2	8	1	10	—	3	26	34

County Hostels for the Elderly

The number of persons maintained by Durham County Council in hostels at 31st December, 1962, was 21.

Children in Care

Children belonging to Billingham which were in the care of Durham County Council at 31st December, 1962, numbered 40.

Morbidity

A return of new claims for sickness benefit is provided weekly under the National Health Insurance Scheme.

Monthly statistics for the year are given below. These give a weekly average of 126.7 against 137.8 for 1961, and a monthly figure of 548.8 against 566.6 last year.

Month	1962	1961
January	1,191	951
February	510	953
March	575	471
April	573	432
May	425	499
June	373	417
July	465	349
August	341	472
September	504	413
October	468	646
November	545	571
December	626	626
	<hr/> 6,596 <hr/>	<hr/> 6,800 <hr/>

Health Education

This has become an essential and very important part of public health work. It should undoubtedly be encouraged and expanded. While most health educational subjects were dealt with during the year, since the findings of the Royal College of Physicians were made known giving almost conclusive evidence of the association between cigarette smoking and lung cancer as well as many other respiratory and cardiac diseases, precedence was given to intensifying campaigns in an effort to try and persuade people either to give it up or resolve never to develop the habit. In addition to the well tried techniques of poster and leaflet distribution, a film on loan from the Ministry of Health was shown in schools.

Women's Voluntary Service

Mrs. E. C. Watkins, Acting Centre Organiser, kindly supplied me with details of work carried out during 1962 by the W.V.S. for aged and other persons in the area as follows:—

Chiropody

There were 1,703 treatments given. Each treatment cost 2/6d., made up by a charge to old people of 1/9d., the remaining 9d. being subsidised by the W.V.S. This subsidy has until now been donated by various bodies. Next year, in addition, Durham County Council are making a grant towards this very important service.

Clothing

Various kinds were distributed to 69 needy families, a total of 200 persons being supplied. The demand for men's and boys' clothing exceeded the supply.

Meals on Wheels

There were 5,042 meals delivered during the year, an increase of 662 on last year's figure. They were cooked at the Furness Shipyard at a cost of 1/10d. each. The old people pay 10d. and the Council subsidy is 1/-d. per meal.

CANCER DEATHS—1953—1962

	1953		1954		1955		1956		1957		1958		1959		1960		1961		1962		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Neoplasm—Lung, Bronchus ..	5	—	8	—	6	1	6	3	17	1	11	2	8	—	16	—	12	1	13	3	102	11
„ —Stomach ..	7	2	6	2	5	4	6	3	5	2	3	3	6	8	3	9	4	4	6	5	51	42
„ —Breast ..	—	4	—	8	—	—	—	—	—	1	—	4	—	3	—	—	—	4	—	4	—	28
„ —Uterus ..	—	2	—	4	—	3	—	—	—	3	—	3	—	1	—	2	—	2	—	2	—	22
Other Malignant and Lymphatic Diseases ..	8	6	14	7	11	13	4	7	14	5	12	5	15	9	11	12	15	20	14	8	118	92
Leukaemia and Aleukaemia ..	1	—	1	—	1	1	1	1	—	—	—	—	1	1	2	—	1	—	—	—	8	3
Totals:	21	14	29	21	23	22	17	14	36	12	26	17	30	22	32	23	32	31	33	22	279	198

The above table shows male and female cancer deaths (various sites) each year.

Ante-natal Keep Fit and Relaxation Class

This class is held every Thursday at 2 p.m. in the Community Centre under the Durham County Council Further Education Scheme.

The instructor reports:—

- “ 1. Number of students attending class during last 3 terms, 150.
2. Students come from Billingham district and even as far as Hartburn to Hardwick areas of Stockton.
3. Attendance excellent—most students come for the last 12 weeks and attend right up to their confinement.
4. Visiting lecturers (a) Personal Hygiene, by Mrs. Fletcher.
(b) Baby Food—Trufood representative.
(c) Gas and Air Machine — Nurse Goodman.

At present each student must bring her own towel or rug to lie on during the relaxation exercises. It would be a great help if blankets or rugs could be provided.

Baby Minding

When the W.V.S. stopped attending and I had no help with the extra children I was very worried. However, I now think this has turned out for the best as the children now join their mothers in doing the exercises.

Many thanks to Dr. Benham and her staff for helping at all times, and in the provision and distribution of health education material.

To Nurse Goodman for giving her free time and letting a 20-minute demonstration become an hour of questions and answers.

To the Community Centre Warden and staff for allowing us the use of a room during the holidays. This enabled the classes to be continued without interruption; and also, of course, to the family doctors for their wholehearted support.

With all this help and goodwill I don't see how this class could fail.

JENNIE BLOTT.”

GENERAL PROVISIONS OF HEALTH SERVICES FOR BILLINGHAM

Hospitals

These are under the control of the South Tees-side Hospital Management Committee and the North Tees Hospital Management Committee. Treatment of patients from the Urban District is available at hospitals at Middlesbrough, Stockton and Sedgefield.

Infectious Diseases

Cases are admitted to West Lane Hospital, Middlesbrough.

Tuberculosis

The main hospital for tuberculosis is the Poole Hospital, Middlesbrough. Clinical treatment and X-ray are carried out at the Chest Clinic, Bowesfield Lane, Stockton.

Venereal Disease Clinic

This is held at the Stockton and Thornaby Hospital as follows:—

Tuesday (females)	...	...	2.00 to 4.00 p.m.
(males)	...	...	4.00 to 6.30 p.m.
Saturday (males and females)	...		9.00 to 10.30 a.m.

Ambulance Service

This is a Durham County Service and is stationed at the Ambulance Station, Grangefield Road, Stockton, telephone number 67410.

Maternity and Child Welfare Services provided by Durham County Council

There are three Welfare Centres in the area: Queensway, Cowpen Lane and The Nursery, Haverton Hill.

Ante-natal, post-natal, ultra violet ray, birth control and dental sessions are held at these centres as follows:—

Queensway Clinic, Queensway, Billingham

Child Welfare: Mondays, 9.30 a.m. to 12 noon and 1.30 p.m. to 3.30 p.m. Alternate Tuesdays, 1.30 p.m. to 3.30 p.m.

Immunisation: Alternate Tuesdays, 9.30 a.m. to 12 noon.

Ante-natal: Alternate Fridays, 9.30 a.m. to 12 noon.

Family Planning Clinic: Tuesdays, 7.00 p.m. to 8.00 p.m. (Family Planning Association.)

Dental Clinic: For expectant mothers and children under five years of age—by appointment.

Cowpen Lane Clinic

Child Welfare: Wednesdays, 9.30 a.m. to 12 noon.

Ante-natal, Post-natal and Birth Control: Alternate Wednesdays, 1.30 p.m. to 3.30 p.m.

Sunlight: Wednesdays, 1.30 p.m. to 3.30 p.m.

Haverton Hill Clinic, The Nursery, Haverton Hill

Ante-natal and Infant Welfare: Alternate Wednesdays, 1.30 p.m. to 3.30 p.m.

Welfare Foods

These are obtainable on the days the welfare clinics are open and also at the W.V.S. Centre, South View, Billingham, Wednesdays and Thursdays.

Midwives—District Nurses—Health Visitors serving the Urban District are as follows:—

Midwives

Mrs. A. Banner, 9 Chilton's Avenue, Billingham.

Mrs. J. Goodman, 16 Windlestone Road, Billingham.

Mrs. M. Jones, 8 Elemere Court, Billingham.

Miss M. Hall, 7 Seaton Terrace, Haverton Hill.

District Nurses

Mrs. J. Bulmer, 26 Windlestone Road, Billingham.

Mrs. R. Clark, 102 Wolviston Road, Billingham.

Miss A. J. McEvoy, 51 Bedale Avenue, Billingham.

Mrs. H. Harris, 46 Wolviston Road, Billingham.

Health Visitors

Miss G. M. Leak, 24 Chesham Road, Norton-on-Tees.

Miss W. Tait, 13 Wilmire Road, Billingham.

Miss B. Allinson, 40 Jubilee Grove, Billingham.

School Clinic, Queensway, Billingham

Tuesday: 9.30 a.m. to 12 noon.

Friday: 9.30 a.m. to 12 noon and 1.30 p.m. to 4.00 p.m.

School Medical Officer in attendance.

Ears. A specialist visits the School Clinic once a month and forms for appointment can be obtained at the clinic.

Ophthalmic School Clinic

This clinic is held at Queensway on Mondays, by appointment between 12.30 and 1.30 p.m.

Residential Accommodation

This accommodation is provided for persons who by reason of age, or infirmity, are in need of care and attention. Hostels are provided throughout the County. Parkside Hostel, in Melrose Avenue, is mainly for Billingham people, but there are also hostels at Greatham, Seaton Carew and Stockton.

Domestic Help Service

Through the County Scheme domestic help is provided for households where help is required on account of sickness, an expectant mother, a mentally defective, a child under school age or the aged.

April, 1963.

SENIOR PUBLIC HEALTH INSPECTOR'S REPORT FOR 1962

Mr. Chairman, Madam and Gentlemen,

I beg to submit herewith my thirty-seventh, and last, Annual Report on the work of my department. I was appointed on the 1st May, 1926, and it has been my pleasure and privilege to serve you for the past 37 years. It has been a wonderful and richly rewarding experience and if, as I believe, the health, comfort and welfare of the people of Billingham has benefited from my efforts, then I am amply repaid. To say that the years have passed quickly is a sure indication that I have been extremely happy in your service and apart from the rough and tumble of Committee work, which is inherent in Local Government work, I have been singularly fortunate in having the full confidence and support of the Council through all the changes that have occurred during this period. It will, I feel sure, be interesting for future reference to put on record the principal changes that have occurred since I took office.

To begin with, I was the first full-time Public Health Inspector appointed by the Council as the district was developing rapidly. My first job was to institute a proper meat inspection system as this was urgently needed, and which prevented much diseased meat from being sold for human consumption. Clean and safe milk production was next organised and with the help and encouragement of a keen Public Health Committee cowsheds were improved, cleaner methods introduced and all supplies were tested at regular periods for bacterial count, butter fat, and the presence of tubercle bacilli. This latter test was most important and on one occasion 2 out of 11 samples put to the biological T.B. test were positive. What was more to the point, the farms in question were visited by the Veterinary Officer and myself and the diseased cows were removed and slaughtered. What a change now when all supplies are pasteurised, although it took a war to bring about this essential change.

To the present generation privy middens are almost unknown but hundreds were in use in the twenties. Schemes to convert these to the water carriage system by contract and direct labour were put in hand and by the early thirties few remained. This conversion work introduced the dust bin and refuse collection needed reorganising. At the time horses and open block carts were in use which were uneconomic and most insanitary. A suitable motor vehicle was purchased for less than £800, the cost being saved the first year in addition to providing a more regular and hygienic service. Refuse disposal also came in for attention and crude tipping was improved by the employment of a full-time attendant.

Housing, that is as applied to the repair of older properties and demolition of slum properties, and a most important matter, came in for attention and it is merely a statement of fact to say that hundreds of houses have been improved by repair work and hundreds more demolished under slum clearance schemes or where they were not capable of being made fit for habitation at reasonable expense. Another aspect of housing was the 1936 overcrowding survey which for the first time laid down a definite legal standard of overcrowding. Admittedly, the standard is a low one, as living rooms are taken into account, but this could easily be improved by excluding such rooms.

Infectious diseases were much more prevalent in those days, particularly scarlet fever and diphtheria. The latter is now unknown and scarlet fever is of little importance. It is interesting to recall that cases of smallpox were notified in 1926 and also that I prepared the first scheme for immunising against diphtheria.

During the war, which I prefer to look upon as an unpleasant episode, I was responsible for the casualty services including first aid posts, first aid party depots and ambulance depots. I was also responsible for the food decontamination service.

Lastly, due to local circumstances, I have been much concerned with air pollution. In the late twenties local industry was growing at a rapid pace and serious problems of air pollution arose. The most serious issue was the emission of dust and grit which literally rained down on the Belasis area causing widespread concern and heated discussions in the Council Chamber. The nuisance grew progressively worse as extra boilers using high ash content pulverised coal were brought into use. It is impossible to detail all the steps taken to bring about a remedy but every avenue was explored including having the matter raised in the House of Commons. The difficulty was that suitable equipment was not available. However, by continual pressure from the Council and good will on the part of the company the nuisance was very largely abated by a system of chambers fitted with elements washed by water followed by water sprays. A further nuisance from the same works was caused by emissions from a sulphuric acid plant which at times were reminiscent of a gas attack. Scrubbing with ammonia neutralised these gases and electro-precipitators reduced vapour emissions. Other nuisances from cement dust and various other dusts, offensive "cat" and "fish" smells have been successfully dealt with. During my years of office I have endeavoured to develop and foster a spirit of co-operation with all firms concerned and I am particularly happy to record that this relationship was never better than at the present time, and I would like to end this brief survey on this note.

The report follows usual practice, details of which will be found in the following pages. During the year the pupil Public

Health Inspector passed his qualifying examination and was placed on the staff as an additional Public Health Inspector and will become increasingly useful in the work of the department.

In conclusion I wish to express appreciation to the members of my staff for their capable and willing assistance throughout the year, and to the Chairman and members of the Public Health Committee for their generous support in all matters affecting my department.

I am,

Your obedient Servant,

A. H. RUSHWORTH,

Senior Public Health Inspector.

SUMMARY OF INSPECTIONS MADE AND OTHER DETAILS

Bakehouses	...	...	...	...	...	...	1
Canteens	...	...	...	...	...	...	4
Complaints Investigated	...	...	...	...	...	...	744
Drains Tested or Inspected	...	...	...	...	...	...	53
Dwelling Houses under Infectious Diseases	...	...	...	...	...	...	59
Dwelling Houses under Public Health Acts	...	...	...	...	...	...	138
Dwelling Houses under Housing Acts	...	...	...	...	...	...	32
Factories and Factories Act	...	...	...	...	...	...	18
Food	...	...	...	...	...	...	177
Interviews	...	...	...	...	...	...	129
Licensed Premises	...	...	...	...	...	...	3
Meat	...	...	...	...	...	...	424
Miscellaneous Housing Visits	...	...	...	...	...	...	12
Miscellaneous Sanitary Visits	...	...	...	...	...	...	57
Offensive Accumulations	...	...	...	...	...	...	30
Oil Heater Regulations	...	...	...	...	...	...	10
Overcrowding	...	...	...	...	...	...	14
Premises under Notice	...	...	...	...	...	...	21
Public Baths	...	...	...	...	...	...	87
Public Conveniences	...	...	...	...	...	...	3
Rats and Mice	...	...	...	...	...	...	2
Refuse Collection	...	...	...	...	...	...	343
Refuse Disposal	...	...	...	...	...	...	158
Restaurants	...	...	...	...	...	...	8
Schools	...	...	...	...	...	...	4
Shops (Food Hygiene and Shops Act)	...	...	...	...	...	...	199
Smoke Observations	...	...	...	...	...	...	1,014
Smoke Control Areas	...	...	...	...	...	...	342
Stables, Piggeries and Allotments	...	...	...	...	...	...	25
Street Vendors and Hawkers' Carts	...	...	...	...	...	...	72
Theatres and Places of Entertainment	...	...	...	...	...	...	2
Verminous and Dirty Premises	...	...	...	...	...	...	32
Water Samples from Public Baths	...	...	...	...	...	...	48
Water Supply	...	...	...	...	...	...	6
Works in Progress	...	...	...	...	...	...	19

NUMBER AND TYPE OF NOTICES

Informal Notices Served	...	...	...	...	...	169
Informal Notices Complied With	...	...	...	...	...	166
Statutory Notices Served	...	...	...	...	...	—
Statutory Notices Complied with	...	...	...	...	...	—

SUMMARY OF NUISANCES ABATED AND DEFECTS REMEDIED

Defective Roofs	...	...	...	...	...	...	6
„ Eaves, Gutters and Fallpipes	...	...	...	...	...	...	2
„ Walls	...	...	...	...	...	...	1
„ Doors	...	...	...	...	...	...	1
„ Windows	...	...	...	...	...	...	3
„ Chimney Stacks	...	...	...	...	...	...	1

MISCELLANEOUS ITEMS

Defective Drains	...	...	...	...	...	...	—
„ Water Closets	...	...	...	...	...	...	7
Dustbins provided or renewed	...	...	...	...	...	...	346
Blocked drains and sink pipes cleared	...	...	...	...	...	...	559
Verminous Premises disinfected	...	...	...	...	...	...	47
Books disinfected	...	...	...	...	...	...	3

HOUSING

There is not much to comment on regarding housing matters. It still has not been possible to demolish Victoria Street, Sweethills, which is empty except for two owner-occupiers who are not prepared to sell their properties, although there are prospects of one owner being given O.A.P. accommodation. During the year a small clum clearance area was made consisting of twelve houses. The appropriate steps were taken towards the year end, therefore this matter will be resolved in 1963. Improvement of houses under the Housing Act 1949 is not making progress and the Association of Public Health Inspectors have recommended that compulsory powers should be made available. During the year 3 discretionary and 5 standard grants were approved. This brings the number approved to 32 and 17, a total of 49 since inception of the scheme. In this matter there has been an interesting development with the Council purchasing 49 houses of this kind and a scheme is in hand to improve and modernise these houses with a view to possible sale. Supposing the sale idea proves not to be attractive, provided the houses can be let at a rent say below current Council house rents, there should be a demand for this kind of housing accommodation. The number of Council houses built shows a considerable reduction and private building is exactly the same as last year; the actual number compared with the previous year in brackets is given below:—

By Local Authority	...	...	64 (174)
By Private Persons	...	...	127 (127)

OVERCROWDING

Again, the odd case has been dealt with, otherwise overcrowding does not exist.

CARAVANS

The district is free from caravans used as living accommodation.

WATER

The water shortage experienced at Wolviston by way of inadequate pressures and which has been a matter of complaint for a number of years is not yet resolved. However, the Water Board has been approached and a scheme for installing a booster pump is in course of preparation. When the works are completed there should be no cause for complaint.

The Engineer in charge of Supply and Distribution has kindly supplied the usual data, extracts from which, including bacteriological results, are as follows:—

“Bacteriological examinations of the raw waters are carried out approximately weekly and the treated water is examined as it leaves the treatment plants and at various points in the distribution system. Over fifty samples per month of treated water were taken for bacteriological examination and the results of the tests carried out on these samples showed the supply to be of satisfactory purity throughout the year. The supply to Billingham is from Long Newton Reservoir in which water from the Lartington Gravitation Supply is mixed with approximately one-third of its own volume of water from the River Tees derived supply. Summary sheets are enclosed which show the maximum, minimum and average concentrations of the chemical constituents and also give a summary of the bacteriological results obtained during the year on samples from the two main supplies referred to above and also from the blended water leaving Long Newton Reservoir.

The water has no plumbo-solvent action.

Treatment of the Lartington Gravitation Supply was by slow sand filtration followed by chloramination but, towards the end of the year, a rapid gravity plant, in which the water is decolourised by chemical coagulation methods, was brought into operation and this was run in parallel with the slow sand filters. The River Tees derived supply is clarified by chemical coagulation methods followed by rapid gravity filtration and pH adjustment. Final sterilisation with chlorine completes the treatment. The water leaving Long Newton Reservoir is filtered through micro-strainers, which have 160,000 apertures to the square inch, and is then re-chlorinated before passing into supply.

River Tees Derived Supply	Ave.	Max.	Min.
Colony count per ml. on yeast extract agar after 1 day at 37°C.	4	21	0
Colony count per ml. on yeast extract agar after 2 days at 37°C.	5	28	0
Colony count per ml. on yeast extract agar after 3 days at 20°C.	4	19	0
Percentage of samples giving No Presumptive Coliform Reaction per 100 ml.		100%	

Percentage of samples showing **No** re-
action for **B. coli** (Type 1) per
100 ml. 100%

Lartington Gravitation Supply

Colony count per ml. on yeast extract agar after 1 day at 37°C.	23	76	0
Colony count per ml. on yeast extract agar after 2 days at 37°C.	30	80	0
Colony count per ml. on yeast extract agar after 3 days at 20°C.	23	80	0
Percentage of samples giving No Pre- sumptive Coliform Reaction per 100 ml.		100%	
Percentage of samples showing No re- action for B. coli (Type 1) per 100 ml.		100%	

SEWERAGE AND SEWAGE DISPOSAL

Following loan sanction work on the Cowpen Bewley Village
sewerage scheme is now proceeding.

CLOSET ACCOMMODATION

A few privy middens remain in Cowpen Bewley Village, but
five have been converted to the water carriage system under Section
16, Public Health Act 1936.

PUBLIC CLEANSING

The usual detailed report on refuse collection and disposal is
attached to this report.

BAKEHOUSES

Baking, at least for the small man, does not seem to be an
attractive occupation. Two small bakehouses are in use, but there
seems no likelihood of others being established. The premises
have been inspected occasionally and found to be satisfactory.

SHOPS

The number and type of shops is shown below:—

Food Shops:

Fried Fish and Chips	15
Wet Fish	3
Grocers and General Dealers... ..	58
Butchers	21
Greengrocers	16
Bread and Cakes	12
Sweets, etc.	24
Cafes and Snack Bars	7

	156
Other Shops	93

249

CLOSING HOURS

There is no change in respect of the law relating to shops although a new act is long overdue. During the year a number of inspections have been made between 9 and 10 p.m. mostly on the late night (Friday) but few shops are open at this time and they are confined to sweets shops. The general practice is for shops to close between 5 and 6 p.m. and from a shop assistant's point of view this is quite late enough. With the five-day week in general use shopping can be done on Saturday.

FOOD HYGIENE REGULATIONS, 1960

The question of food hygiene has received consideration and we find shopkeepers willing to accept advice and suggestions. There is a general awareness of the need for better food handling and I think it is true to say that a bad shopkeeper would not be in business very long. In other words, the general public have a direct responsibility in this matter and as they become more hygiene conscious so will they expect better standards.

REGISTRATION OF FOOD PREMISES

The number and type of food premises registered under Section 16 of the Food and Drugs Act, 1955, is given below:—

Prepacked ice cream ...	...	61
Preserved foods ...	...	14
Fried Fish ...	...	15

INSPECTION AND SUPERVISION OF FOOD

A. Milk

Apart from small quantities of T.T. raw milk the supply is pasteurised. Some sterilised milk is also sold. Distribution is in the hands of three large concerns and two small retailers.

B. Meat

Only high quality meat is produced in three private slaughter-houses which are in use. The question of inspection poses no problems as a good understanding exists between the butchers and my department. Disease is not now the problem it used to be and we rarely come across tuberculosis which formerly was a common occurrence. Liver fluke continues to be the principal cause of condemnation. The following table gives the usual information:—

Carcases and Offal Inspected and Condemned in Whole or in Part

	Cattle exclud- ing Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed (if known)	337	4	0	1001	51
Number inspected	337	4	0	1001	51
All diseases except Tuberculosis and Cysticerci					
Whole carcasses condemned	—	—	—	1	—
Carcases of which some part or organ was condemned	37	1	—	5	—
Percentage of the number inspected affected with diseases other than tuber- culosis and cysticerci	10·98	25·0	—	0·60	—
Tuberculosis only:					
Whole carcasses condemned	—	—	—	—	—
Carcases of which some part or organ was condemned	1	—	—	—	—
Percentage of the number inspected affected with tuberculosis	0·30	—	—	—	—
Cysticercosis					
Carcases of which some part or organ was condemned	—	—	—	—	—
Carcases submitted to treatment by refrigeration	—	—	—	—	—
Generalised and totally condemned	—	—	—	—	—

C. Other Foods

Inspection of a variety of foodstuffs required considerable attention and a wholesale warehouse frequently made use of our service. It now seems accepted practice to require a certificate of unsoundness from the department before firms will accept responsibility for unsatisfactory foodstuffs. One high class firm of food producers also require to know the cause for condemnation in order to examine their processes with a view to preventing faults recurring. The following is a list of goods condemned:—

Miscellaneous Foodstuffs (tinned)	1,219	tins
Miscellaneous Foodstuffs (packets)	52	pkts.
Bacon and Ham	224	lbs.
Sausage	32½	lbs.
Cooked Ham, Pressed Beef, etc....	17¼	lbs.
Tinned Meat	736	tins
Tinned Fish	166	tins
Tinned Milk	691	tins
Tinned Fruit	1,095	tins
Tinned Soup	216	tins
Meat Pies	25	
Flour, Oatmeal, etc.	7	lbs.
Cake and Biscuits	3½	lbs.
Margarine and Butter	2	lbs.
Cheese	39½	lbs.
Jam, etc.	58½	lbs.
Dried Fruit	35	lbs.
Coconut	1	lb.
Beef	40	lbs.
Suet	7½	lbs.
Chickens	1	

D. Adulteration

A few samples of foodstuffs submitted to the Analyst were reported to be of genuine quality.

PUBLIC SWIMMING BATHS

The usual information relative to attendance at the Public Baths is given below:—

	1961	1962
General Public ...	76,169	74,144
Use of Slipper Baths...	1,220	988
Brine Baths	29	74
Private Sessions ...	1,627	2,000

Attendances have remained at the same level as the previous year. The Baths remain open during the winter period and during the daytime are reserved by the Education Authorities for the use of school children. During the year 48 samples of water have been obtained for bacteriological examination, the following being a common example:—

	Plate Count 2 days @ 37°C.	Coliform Bacilli
Swimming Pool Draw Off Tap	0	Absent
Swimming Pool	0	Absent

High pressure filters followed by chlorination is the method of purification.

During the year another swimming bath attached to a Campus School has come into use. Samples of water have been obtained from this source also and the results proved to be just as excellent as the above example.

AIR POLLUTION

The position concerning the Belasis Lane area which is seriously affected by industrial pollution has not altered to any appreciable extent. A coke oven plant closed a year ago but any improvement from this action is not yet noticeable. In point of fact, the nuisance from this plant consisted mainly of some smoke made when charging and local dust and grit when pushing the ovens and during coke quenching. There can be no doubt that the boiler plant is still the major source of nuisance which is to be expected when more than a million tons of coal are burned annually. This is fairly high ash content coal and assuming the de-dusting equipment removes 97% of dust and grit, an appreciable amount is still emitted. Moreover, large quantities of sulphur are also emitted. Improvement on this plant could be made by scrapping the wet washing system and installing electrostatic precipitators in conjunction with higher chimneys, but this would be very expensive. Sulphur, of course, would still be emitted but it would be dry, and not cooled and discharged at a higher level, which would give a much better dispersion factor.

Two developments in connection with the boiler plant should be beneficial. In one case the use of six old boilers has been discontinued and four new plants erected to replace the coke ovens will feed surplus steam into the boiler plant, thereby reducing the amount of coal burnt. What the overall effect of these measures will be remains to be seen. The use of oil would make an improvement but sulphur emissions would be something of the same order.

During the year fumes from a sulphuric acid plant have been rather troublesome, but the firm have agreed to put in electrostatic precipitators which should provide adequate control.

There has been no complaint concerning the "cat" smell and a completely new Amines Plant specially designed to prevent emissions which give rise to the "fish" smell is now in operation.

The domestic aspect of clean air is now making good progress. No. 1 area, containing over 2,000 houses, came into operation on the 1st June, 1962, and No. 2 area, also containing approxi-

mately 2,000 houses, has been submitted to the Minister of Housing and Local Government for approval. It is a point of satisfaction that only one person objected and he was later persuaded to withdraw. The obvious inference must be that there is a large measure of public support for smoke control areas. A third area will be surveyed in the near future.

The Tees-side Clean Air Committee continues to serve a useful purpose as a common meeting ground for exchange of opinions and experiences.

Although the D.S.I.R. no longer recognise the standard deposit gauge as a worthwhile instrument it has been decided to keep them in use to monitor local deposits. Only undissolved matter is being determined. Once again Billingham has led the way by adopting the use of the Volumetric SO₂ Recorder which is being used by the D.S.I.R. for their National Survey. Several local authorities on Tees-side are now using this instrument and in due course much valuable information will be available. During the year the Technical Sub-Committee has considered deposit gauge results over the past twelve years and the report is of sufficient interest to give a copy below.

" In order to try and determine a trend in the pollution on Tees-side the Sub-Committee invited all the co-operating authorities to supply them with details of the total solids and insoluble deposits recorded in those deposit gauges which had been in the same position for more than five years, and five yearly moving averages have been worked out for all these gauges which are situated in the areas of 11 different local authorities. An attempt has been made to assess whether the trend of total pollution and of insoluble deposits could be defined in one of five ways:—

Definitely downwards.
Slightly downwards.
Static.
Slightly upwards.
Definitely upwards.

Industrial Gauges

There are seven of these gauges which have been on the same site for between 9 and 12 years and six of these gauges are in areas of heavy industrial development. The results are:—

		Total solids	Insoluble solids
Definitely downwards	...	4	4
Slightly downwards	...	1	1
Static	...	—	2
Slightly upwards	...	2	—
Definitely upwards	...	—	—

Taking the five yearly average figures for 1957-61 compared with the average for 1952-56, there has been a 17% fall in the

insoluble deposits and an 11% fall in total deposits.

Semi-industrial Gauges

There are 15 of these gauges which have been on their existing sites for 8 to 12 years, and the results are as follows:—

		Total solids	Insoluble solids
Definitely downwards	...	8	10
Slightly downwards	...	2	—
Static	...	1	2
Slightly upwards	...	3	2
Definitely upwards	...	1	1

Taking the five yearly average figures for 1957-61 compared with the average for 1952-56, there has been a 32% fall in insoluble deposits and a 24% fall in total deposits.

Residential Gauges

There are 21 of these gauges which have been on their present sites for 8 to 12 years, and the results are as follows:—

		Total solids	Insoluble solids
Definitely downwards	...	8	4
Slightly downwards	...	2	2
Static	...	6	7
Slightly upwards	...	2	6
Definitely upwards	...	3	2

Taking the five yearly average figures for 1957-61 compared with the average for 1952-56, there has been a 1½% fall in insoluble solids and a 7% fall in total deposits.

Whilst a similar analysis cannot obviously be carried out for those gauges which have only been in position for 3 to 5 years an analysis based on yearly results gives the following pattern:—

	Total solids			Insoluble solids		
	Ind.	Semi-	Res.	Ind.	Semi-	Res.
	Ind.			Ind.		
Definitely downwards...	—	—	3	1	1	4
Slightly downwards	...	1	4	—	—	3
Static	...	1	3	—	1	4
Slightly upwards	...	—	1	—	—	—
Definitely upwards	...	—	—	—	—	—

These results tend to follow the same, or perhaps even slightly better, pattern than those of the gauges which have been in position longer.

Conclusion

It is clear that there has been a substantial reduction in dust deposits in those areas of Tees-side which are very close to the heavy industries and in those areas which are of mixed

industrial and domestic development. The reduction of dust deposits in areas which are in the main residential is much more moderate. It should be emphasised that these results relate to a period ending in 1961, which is before the present industrial recession could influence results.

On the whole, the results indicate that over the past 12 years, in spite of the vast development of industry and housing the work of the Tees-side Clean Air Committee is undoubtedly proving effective. Nevertheless, some of the figures still remain too high and there are no grounds for complacency. The trends, however, have clearly shown that there is a gradual reduction in the amount of dust being deposited and that all parts of the area, with isolated exceptions, are benefiting to a greater or lesser degree. The reductions have been steady and there is no reason to suggest that the trend should not continue, providing the constituent authorities of the Committee do not relax their efforts.

Based upon the results of the 43 gauges which have been in position during the whole period, there has been on average 20% drop in insoluble deposits over the area and a 15% drop in total solids during the past five years.

It should be reiterated that these gauges are principally designed for the measurement of dust in the form of insoluble deposits, the bulk of which emanates from industrial premises. Smoke pollution is more effectively measured by a volumetric smoke filter but the figures are not, of course, available because the filters have not been in position very long. It is suggested that the Technical Sub-Committee should endeavour to carry out a preliminary analysis of the results of these instruments in about twelve months' time.

Meanwhile, it is suggested that member authorities should not lightly discontinue deposit gauge determinations of insoluble deposits in those gauges which have been in position for the past ten years."

The Alkali Works Inspector attends meetings of the Main Committee and Technical Sub-Committee and also makes contact with Chief Public Health Inspectors where necessary. This is a most valuable type of co-operation and much appreciated.

The following is a list of the principal sources of emission with short notes thereon:—

- (1) **Pulverised fuel boilers.** These boilers are referred to in the preceding paragraph.
- (2) **Cement Works.** Emissions are well controlled by cyclones followed by electrical precipitators. The latter are to be rebuilt in the near future and this will provide an opportunity to make improvements to increase efficiency.

- (3) **Coke Ovens.** These are demolished.
- (4) **Water Gas Plant.** This plant will close down when the new Steam Reforming Plants are in operation.
- (5) **C.C.F. Plant.** This plant has given no trouble as the emissions disperse quickly.
- (6) **Nitro-Chalk Plant.** There has been no trouble from this source.
- (7) **Anhydrite Dust.** The scheme for improving crushing and loading operations is completed but due to present circumstances very little anhydrite is being dispatched and then from another point in the factory.
- (8) **Amines Plant.** During the year an entirely new plant has been built and is now in operation. Special care has been taken to avoid the possibility of leaks occurring which give rise to the characteristic "fish" smell and which has been the cause of complaints considerable distances from the plant. So far the new plant seems to be a great improvement and it is to be hoped that this is the answer to the problem.
- (9) **Sulphuric Acid Plant.** These emissions have been a frequent source of trouble and the works have been contacted on many occasions. Over a period of years I have suggested that electric precipitators should be fitted to two older units which cause the trouble and towards the year end the firm finally agreed to do this. Work on the project is expected to take about nine months and when completed it is confidently expected that considerable improvement will be made to the Belasis Lane Area.
- (10) **Paint Pigment Process.** These works have not given rise to any complaint and the plant put in some time ago continues to function efficiently. Likewise the sulphuric plant has not been the cause of any trouble.
- (11) **Electricity Power Station.** Following the trouble we had last year every effort has been made to prevent any nuisance. Improvements to the dust removal handling plant have been made and at times conditions are so good that it is only just possible to see any emissions from the stack.

STANDARD DEPOSIT GAUGES

Undissolved Matter and Fe_2O_3 Collected (Tons per Sq. Mile)

Averages for Moving Five Yearly Periods. 1954-1962

Site of Gauge	Years	No. of Mths.	Undissolved Matter		Rainfall		Fe_2O_3		
			Total	Average	Total	Ave.	No. of Mths.	Total	Ave.
Crawford's Shop (Industrial)	1954-58	53	3939.12	74.32	88.89	1.68	—	—	—
	1955-59	54	3640.99	67.42	82.57	1.53	—	—	—
	1956-60	52	3438.05	66.12	91.06	1.75	—	—	—
	1957-61	47	2948.98	62.74	81.92	1.74	—	—	—
	1958-62	48	2662.87	55.56	80.20	1.67	6	23.46	3.91
Council Offices (Industrial)	1954-58	56	2264.66	40.44	98.07	1.75	—	—	—
	1955-59	56	2158.90	38.55	84.43	1.51	—	—	—
	1956-60	55	1949.95	35.45	86.53	1.57	—	—	—
	1957-61	52	1692.10	36.38	79.56	1.53	—	—	—
	1958-62	48	1404.73	29.26	71.93	1.50	2	7.33	3.66
Haverton Hill Post Office (Semi-Ind.)	1961-62	13	234.80	18.06	18.92	1.45	5	15.69	3.14
35 Tibbersley Avenue (Semi-Ind.)	1955-59	52	576.70	11.09	89.54	1.72	—	—	—
	1956-60	58	651.91	11.24	109.65	1.89	—	—	—
	1957-61	58	571.06	9.84	107.75	1.86	—	—	—
	1958-62	58	513.59	8.85	106.03	1.83	6	18.26	3.04
Harrow Terrace (Semi-Ind.)	1962	1	16.87	16.87	3.67	3.67	1	2.30	2.30
Malvern Road (Residential)	1954-58	57	349.69	6.13	108.58	1.90	—	—	—
	1955-59	56	344.56	6.15	94.63	1.69	—	—	—
	1956-60	57	386.63	6.78	108.19	1.90	—	—	—
	1957-61	55	383.68	6.97	102.37	1.86	—	—	—
	1958-62	56	404.69	7.23	107.11	1.91	6	3.68	0.61
Field 23 (Residential)	1954-58	52	442.96	8.52	75.83	1.46	9	25.48	2.83
	1955-59	54	485.70	8.99	76.45	1.42	19	53.59	2.82
	1956-60	51	485.75	9.52	79.71	1.56	28	70.11	2.50
	1957-61	53	499.50	9.42	77.32	1.46	40	85.94	2.15
	1958-62	52	481.43	9.26	72.58	1.39	51	106.33	2.08
Grosvenor Road (Residential)	1954-58	57	298.46	5.24	107.89	1.89	—	—	—
	1955-59	57	325.82	5.72	100.10	1.75	—	—	—
	1956-60	56	359.08	6.41	111.72	1.99	—	—	—
	1957-61	54	365.43	6.75	105.14	1.95	—	—	—
	1958-62	55	363.70	6.61	104.86	1.91	6	4.76	0.79
Hostel, Melrose Avenue (Residential)	1954-58	52	330.21	6.35	96.24	1.85	—	—	—
	1955-59	59	376.03	6.37	98.23	1.66	—	—	—
	1956-60	60	422.65	7.04	110.06	1.83	—	—	—
	1957-61	59	414.99	7.03	107.69	1.82	—	—	—
	1958-62	59	408.59	6.92	105.00	1.78	6	17.47	2.91
26 Cornwall Crescent (Residential)	1954-58	53	517.95	9.77	102.95	1.94	—	—	—
	1955-59	60	569.52	9.49	105.92	1.76	—	—	—
	1956-60	60	598.59	9.98	117.15	1.95	—	—	—
	1957-61	60	544.38	9.07	115.48	1.92	—	—	—
	1958-62	59	473.97	8.03	112.40	1.90	6	5.66	0.94
109 Braemar Rd. (Residential)	1957-61	50	357.06	7.14	90.15	1.80	44	71.41	1.62
	1958-62	57	376.68	6.61	97.80	1.71	56	83.32	1.49
231 Braemar Rd. (Residential)	1957-61	44	385.53	8.76	84.81	1.92	38	73.98	1.95
	1958-62	49	388.98	7.94	88.51	1.81	48	85.36	1.78

WIND RECORD—S.W. WIND

Year	No. of months	Total percentage	Monthly percentage
1949	12	420.0	35.0
1950	12	390.0	32.5
1951	12	446.4	37.2
1952	12	440.3	36.7
1953	12	478.4	39.9
1954	12	459.7	38.31
1955	12	273.2	22.76
1956	12	270.2	22.5
1957	12	244.4	20.36
1958	12	275.9	22.99
1959	12	314.2	26.18
1960	12	306.7	25.55
1961	12	432.1	36.0
1962	12	340.2	28.35

LEAD PEROXIDE INSTRUMENTS

Statement of the Totals and Monthly Averages—1949-62

Site of Instrument	No. of months	Year	Expressed as mgms. of SO ³ per 100 sq. cms. per day	
			Total	Average
INDUSTRIAL				
Council Offices	10	1949	70·656	7·065
	12	1950	104·244	8·687
	12	1951	88·008	7·334
	12	1952	62·852	5·237
	12	1953	54·691	4·557
	12	1954	123·27	10·27
	12	1955	131·20	10·93
	12	1956	142·17	11·847
	12	1957	153·08	12·75
	12	1958	137·85	11·487
	12	1959	141·26	11·77
	12	1960	136·05	11·34
	11	1961	135·89	12·35
	9	1962	82·49	9·94
SEMI-INDUSTRIAL				
35 Tibbersley Avenue	6	1955	7·79	1·29
	12	1956	20·275	1·689
	12	1957	19·657	1·638
	12	1958	19·22	1·60
	12	1959	17·93	1·49
	12	1960	14·90	1·24
	12	1961	14·37	1·20
	12	1962	16·73	1·39

RESIDENTIAL				
Field 23, N.E. Billingham Station	12	1950	11·136	0·928
	12	1951	11·706	0·975
	12	1952	9·399	0·783
	12	1953	9·507	0·792
	10	1954	12·179	1·217
	12	1955	14·307	1·192
	12	1956	15·61	1·30
	12	1957	14·84	1·23
	12	1958	17·90	1·49
	12	1959	16·59	1·38
	12	1960	14·59	1·22
	12	1961	15·04	1·25
	12	1962	14·16	1·18
51 Grosvenor Road	12	1954	10·261	0·855
	12	1955	11·596	0·966
	12	1956	10·857	0·905
	12	1957	11·93	0·99
	12	1958	12·37	1·03
	12	1959	12·02	1·00
	12	1960	12·07	1·01
	10	1961	6·5	0·65
	12	1962	8·91	0·74
The Hostel, Melrose Avenue	4	1954	6·78	1·69
	12	1955	18·965	1·580
	12	1956	21·77	1·814
	12	1957	20·56	1·71
	12	1958	19·94	1·66
	12	1959	18·14	1·51
	12	1960	14·54	1·21
	12	1961	16·20	1·35
	12	1962	15·28	1·27
109 Braemar Road	5	1957	8·43	1·686
	12	1958	17·79	1·48
	12	1959	16·28	1·36
	12	1960	12·99	1·08
	11	1961	12·40	1·13
	12	1962	14·22	1·185

LEAD PEROXIDE INSTRUMENTS— MONTHLY RECORDINGS, 1962

COUNCIL OFFICES—Ind.			35 TIBBERSLEY AVENUE— Semi-Ind.		
Month	Mgms. of SO³		Month	Mgms. of SO³	
January	17.57		January	2.08	
February	2.30		February	2.43	
March	3.42		March	1.07	
April	4.13		April	0.72	
May	6.54		May	0.73	
June	—		June	0.89	
July	6.78		July	0.53	
August	15.70		August	0.67	
September	15.10		September	0.79	
October	10.95		October	1.08	
November	—		November	2.30	
December	—		December	3.44	
<hr/>			<hr/>		
9	82.59		12	16.73	
<hr/>			<hr/>		
Av. 9.94			Av. 1.39		
<hr/>			<hr/>		
FIELD 23 — Resid.			51 GROSVENOR ROAD— Resid.		
Month	Mgms. of SO³		Month	Mgms. of SO³	
January	1.90		January	0.60	
February	1.07		February	0.56	
March	1.01		March	1.21	
April	1.10		April	1.02	
May	0.64		May	0.39	
June	1.01		June	0.86	
July	0.81		July	0.30	
August	0.50		August	0.23	
September	1.46		September	0.45	
October	0.80		October	0.59	
November	1.99		November	1.10	
December	1.87		December	1.60	
<hr/>			<hr/>		
12	14.16		12	8.91	
<hr/>			<hr/>		
Av. 1.18			Av. 0.74		
<hr/>			<hr/>		
THE HOSTEL, MELROSE AVE. Resid.			109 BRAEMAR ROAD — Resid.		
Month	Mgms. of SO³		Month	Mgms. of SO³	
January	2.04		January	2.19	
February	1.46		February	0.53	
March	1.53		March	1.37	
April	1.17		April	1.46	
May	0.91		May	0.43	
June	1.06		June	1.34	
July	0.69		July	0.79	
August	0.43		August	0.38	
September	0.79		September	0.88	
October	0.91		October	0.91	
November	1.76		November	1.69	
December	2.53		December	2.25	
<hr/>			<hr/>		
12	15.28		12	14.22	
<hr/>			<hr/>		
Av. 1.27			Av. 1.185		

**VOLUMETRIC SO₂ RECORDERS AND COMBINED
SMOKE FILTERS
MONTHLY AVERAGES — 1962**

Month	SO ₂ in Microgrammes per Cub. Metre of Air		Smoke Concentrations in Micro grammes per cubic Metre of Air	
	Council Offices	Campus School	Council Offices	Campus School
January	1234	259	281	353
February	513	No Record	126	No Record
March	237	110	190	211
April	222	51	93	113
May	329	24	76	86
June	523	1	60	26 (50)
July	268	25	53	31 (42)
August	546	9	62	31 (47)
September	804	30	100	57 (102)
October	619	34	159	105 (165)
November	489	128	243	177 (263)
December	626	157	337	272 (391)

Note:—No. 1 Smoke Control Area came into operation on the 1st June and its effect can be seen by a decrease in smoke concentrations at the Campus School. Data for 1961 is shown in brackets for comparison.

INFECTIOUS DISEASES

Disinfection of infected houses is carried out on request and library books removed from such houses are also disinfected before being returned to the library.

VERMINOUS PREMISES

The most numerous complaints of this nature were in respect of clover mites and cockroaches. All infestations were effectively dealt with by using an appropriate insecticide.

PREVENTION OF DAMAGE BY PESTS ACT, 1949

This useful work has continued on the basis of sharing the services of a rodent operative with an adjoining R.D.C. Details of work done compared with the previous year are given in the following table:—

	1961	1962
Premises visited	140	165
Inspections made	152	168
Treatment visits	361	346
Premises treated	76	81
Major infestations found (rats)	—	—
Minor infestations found (rats)	76	18
Serious infestations found (mice)	—	—
Minor infestations found (mice)	14	18
Sewer treatments	2	2
Manholes prebaited	369	354
Manhole poison takes	28	22

There has been no significant change with infestations remaining on the same level.

ANNUAL REPORT ON REFUSE COLLECTION AND DISPOSAL FOR THE YEAR 1962/63

Mr. Chairman, Madam and Gentlemen,

I beg to submit herewith my Annual Report on the collection and disposal of household and shop refuse.

The most outstanding feature of the year has been the much improved regularity of collection, in fact, the weekly collection is better now than at any time since 1939. This is a pleasant change and much of the credit must go to the foreman, who takes a keen interest in every aspect of this work including encouraging good relations and a sense of responsibility with the men, without which no department can function successfully. I am most grateful and appreciative of what is done by these men during all kinds of weather conditions and I am sure their efforts are recognised also by householders if comments which I have frequently heard are any guide.

In conclusion I wish once more to express my appreciation to the Chairman and members of the Public Health Committee for their support and consideration in all matters relating to this service.

I am,

Your obedient Servant,

A. H. RUSHWORTH,

Senior Public Health Inspector.

MANUAL LABOUR

The number of men employed and the nature of their duties is given below:—

Foreman	...	...	...	...	...	1
Mechanic	...	...	...	...	...	1
Refuse Collection and Salvage of Waste						
Materials	...	...	...	...	...	21
Refuse Disposal	...	...	...	...	...	1
Drivers	...	...	...	...	...	5
						29

One reason for a more regular service has been the improved labour position. This is probably due to increasing unemployment,

and consequently men are prepared to take what previously was considered to be a not too congenial job at unattractive pay, and another contributory factor has been less absenteeism. Sickness remained at the same level as last year but this was mostly due to respiratory complaints during February and March. Details are given in the following table:—

Sick pay		Absence
Days	Amount	Days
686½	£ s. d. 794 17 8	56½
(694)	(919 3 2)	(104½)

Wages amount to 63.2% of the gross cost of the service.

VEHICLES

Obviously, an adequate number of vehicles is required in relation to the number and type of properties to be serviced. In this respect a further improvement has been made by the purchase of another new machine which will allow an old machine in need of extensive repairs to be scrapped. Bringing the fleet up-to-date has contributed in no small measure to the improved service mentioned earlier. The position now is that we have three S. & D. fore and aft tipping 16/18 cu. yd. machines fitted with power presses, and one Dennis compression type machine. An older S. & D. fore and aft tipping machine is used as a spare. Last year it was suggested that a further machine should be in daily use to cope with additional houses and shops built during the past 7 or 8 years since the previous extra machine was obtained. However, house building has slowed down to some extent and for the time being four machines are doing the job but, to take care of future developments, a new machine is to be ordered for delivery early in the 1964/65 financial year.

The usual tables are given indicating reliability, running costs and work done. Weight per load is based on test weighings.

RELIABILITY

Vehicle	Possible No. of hours	No. of hours lost for repairs	Percentage of hours worked
No. 1 RPT. 854	1912 (2193)	324 (239)	83.1 (89.1)
No. 2 218 GPT	2184 (2239)	77.5 (34)	96.5 (98.5)
No. 3 7039 PT.	2153 (874)	128 (28)	94.1 (96.8)
No. 4 1298 UP (8 months)	1542 —	23 —	98.5 —
No. 6 LPT 548 (9 mths)	707 (1953)	205 (183)	71.0 (90.6)
No. 7 NUP 30	1305 (2222)	241 (202)	81.5 (90.9)
Angle Dozer	851 (1748)	323 (274)	62.0 (84.3)
“Europa” Shovel (9 months)	1429 —	263 —	81.5
Van 675 BUP	1751 (1700)	71 (42)	95.9 (97.6)

RUNNING COSTS

Vehicle	Capacity cu. yds.	Total Cost	Driver's Wages	Insurance and Licences	Fuel and Oil	Maintenance and Repairs	Garage Rent
No. 1 (Diesel) (1955)	19.5/25	£ s. d. 1299 16 1 (1625 7 6)	£ s. d. 561 14 11 (644 7 2)	£ s. d. 138 4 6 (138 4 6)	£ s. d. 173 4 9 (222 12 7)	£ s. d. 374 11 11 (568 3 3)	£ s. d. 52 0 0 (52 0 0)
No. 2 (1960)	16/18	1410 13 6 (1519 17 3)	715 13 11 (738 13 8)	133 0 8 (132 5 8)	413 6 9 (421 4 1)	96 12 2 (175 13 10)	52 0 0 (52 0 0)
No. 3 (1961)	16/18	1352 11 3 (622 15 7)	707 4 2 (283 14 5)	138 16 11 (141 9 8)	359 5 10 (157 15 9)	95 4 4 (18 15 9)	52 0 0 (21 0 0)
No. 4 (1962) 8 months	16/18	1012 0 8 —	519 12 5 —	150 1 3 —	278 13 3 —	26 13 9 —	37 0 0 —
No. 6 (1950)	13.5/18	476 4 0 (1438 16 4)	147 2 5 (672 5 6)	8 0 0 (110 16 2)	111 12 0 (337 2 10)	169 9 7 (266 11 10)	40 0 0 (52 0 0)
No. 7 (1953)	16/18]	900 6 8 (1538 3 5)	382 3 10 (661 14 9)	122 13 10 (122 13 10)	194 9 0 (370 5 2)	149 0 0 (331 9 8)	52 0 0 52 0 0
Angle-dozer (1956)		442 4 11 (672 6 8)	190 16 5 (449 6 9)	6 7 1 (6 7 1)	32 18 4 (48 14 4)	212 3 1 (167 18 6)	
Europa Shovel (9 months)	—	616 7 11 —	410 15 4 —	32 0 2 —	42 12 2 —	131 0 3 —	—
Morris Van (1959)	5 cwts.	161 0 3 (154 6 11)	— —	27 8 4 (25 3 4)	56 2 6 (71 12 7)	64 9 5 (44 11 0)	13 0 0 (13 0 0)

NUMBER AND WEIGHT OF LOADS REMOVED, MILES PER LOAD AND FUEL CONSUMPTION

Vehicle	No. of Loads	Weight per Load		Total Weight	Mileage	Fuel	Miles per Gallon	Miles per Load
		T.	C.					
Salvage				41 (161)		GALLS		
No. 1	434 (550)	4	0	1736 (2200)	6133 (7137)	803 (997)	7·6 (7·1)	14·1 (13·0)
No. 2	728 (779)	3	0	2184 (2337)	10411 (10614)	2097 (2037)	5·0 (5·2)	14·3 (13·6)
No. 3	686 (290)	3	0	2058 (870)	7945 (3360)	1815 (753)	4·4 (4·5)	11·6 11·6
No. 4 8 months	566 —	3	0	1698 —	6578 —	1401 —	4·7 —	11·6 —
No. 6 9 months	147 (557)	3	0	441 (1671)	1979 (6470)	532 (1492)	3·7 (4·3)	13·5 (11·6)
No. 7	385 (742)	3	0	1155 (2226)	4859 (8849)	960 (1740)	5·1 (5·1)	12·6 (11·9)
	2946 (2918)			9313 (9465)	37905 (36430)	7608 (7019)		

REFUSE COLLECTION AND SALVAGE

Reference has already been made to a much improved collection service and it will be appreciated this has been brought about only by hard work by all concerned. A modified working week is in operation whereby the men work from 7.30 a.m. to 5 p.m. four days and finish at 2 p.m. on Friday. This is an advantage to all concerned providing a long week-end for the men and giving the department scope for overtime where necessary at holiday time and during bad weather conditions. The pilot paper sack scheme is expanding slowly and new houses are being provided with this system of refuse storage. Flats and shops are using the system with apparently satisfactory results. New ten-storey flats now being built are to have this system also in conjunction with electric sink waste grinders.

Salvage collection has been a most disappointing item as after going to considerable expense to increase output, due to trade depression the mills will take only a very limited amount.

REFUSE DISPOSAL

Mention was made in last year's report of the serious nuisance caused by wind-blown paper during exceptionally severe gales and that a new mechanical shovel had been purchased to make possible

more effective control of all refuse. This machine has proved most efficient in handling refuse which is covered at the end of each working day. Although this is not the complete answer to the paper nuisance which may occur during tipping and levelling operations, nevertheless, the problem has been effectively reduced and, what is equally important, controlled tipping is being carried out.

During the year an item of considerable interest has been discussed. This concerns an approach to the Council by a firm who are considering erecting a composting and salvage plant in the district and are prepared to take all domestic refuse. If this proposal comes to fruition the problem of refuse disposal will be solved.

NUMBER AND TYPES OF RECEPTACLES

Dust bins	...	...	...	10,067
Privies	...	...	...	18
Ashpits	...	...	...	4

COST

Attached hereto is a copy of Public Cleansing Costing Returns as supplied to the Ministry of Housing and Local Government. It is interesting to note that net cost is £150 less than last year which is all the more satisfactory as it coincides with more properties to collect from and more money spent on disposal to avoid nuisance from wind-blown paper. By efficient organisation labour costs have been reduced by £1,811 and unit costs show a reduction of £14 per 1,000 population and £57 per 1,000 premises. Income from trade refuse is slightly less which would seem to indicate that traders are being more careful and that we are not overcharging for this service. Income from salvage is greatly reduced due to trading conditions affecting demands for waste paper and income is so small that a separate report is not necessary.

APPENDIX I—PUBLIC CLEANSING COSTING RETURN

for the year ended 31st March, 1963

Item	Particulars 1	Collection 2	Disposal 3	Totals 4	Percentage 5
1	REVENUE ACCOUNT				
	GROSS EXPENDITURE				
	(i) Labour	£ 14,130	£ 820	£ 14,950	£ 53
	(ii) Transport	8,844	3,404	12,248	43
	(iii) Plant equipment, land and buildings	113	329	422	2
	(iv) Other items	516	22	538	2
2	(v) Total Gross expenditure	23,603	4,575	28,178	100
	GROSS INCOME	290	480	770	—
3	NET COST	23,313	4,095	27,408	—
4	Capital expenditure met from revenue (included in above)	2,857	2,350	5,207	—
5	UNIT COSTS				
6	Gross cost per ton, labour only	s. d. 30 6	s. d. 1 9	s. d. 32 3	
7	Gross cost per ton, transport only	19 1	7 4	26 5	
	Net cost (all expenditure) per ton	50 4	8 10	59 2	
8	Net cost per 1,000 population	£ 718	£ 126	£ 844	
9	Net cost per 1,000 premises	2,308	405	2,714	
10	OPERATIONAL STATISTICS				
11	Area (statute acres) — land and inland water .. .. .	..	..	..	10,663 acres
12	Population at 30th June, 1961 .. .. .	..	..	..	32,480 persons
13	Total refuse collected .. .. .	..	..	..	9,272 tons
14	Percentage of total refuse collected which is weighed .. .. .	..	..	..	Nil%
15	Weight (cwts.) per 1,000 population per day (365 days to year) .. .. .	..	..	..	15.6 cwts.
16	Number of premises from which refuse is collected .. .. .	..	..	..	10,100 premises
17	Premises from which collections are made at least once weekly .. .. .	..	..	..	100% of total
18	Average haul, single journey, to final disposal point (including nil miles by secondary transport) .. .. .	..	..	..	4½ miles
19	Kerbside collection expressed as estimated percentage of total collection .. .. .	..	..	..	Nil%
20	Total refuse disposed of (of which nil tons were disposed of for other local authorities) .. .. .	..	..	..	9,272 tons
	Method of disposal (Salvage included)				
	(a) Crude tipping .. .. .	....	....	....	Nil%
	(b) Controlled tipping .. .. .	....	....	....	100%
	(c) Direct incineration .. .. .	....	....	....	Nil%
	(d) Separation and incineration .. .. .	....	....	....	Nil%
	(e) Other methods (state nature) .. .. .	....	....	....	Nil%
21	Salvage. Analysis of income and tonnage:				
					100% Income included in Item 2) (inc. in item 12)
					£ tons
	(a) Raw Kitchen Waste .. .. .	..	..	..	—
	(b) Scrap Metal .. .. .	..	..	..	—
	(c) Waste Paper .. .. .	..	..	..	40
	(d) Other Salvage	1
	(e) Totals	41
22	Trade Refuse				
	(a) Income	£436
	(b) Tonnage	218 Tons

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